

## STIC Biotechnology Systems Branch

### RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/776,521A  
Source: IFW/O  
Date Processed by STIC: 2-19-05

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05



IFWO

## RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/776,521A

TIME: 07:39:35

Input Set : E:\SEQLIST (8449-405 Amended).TXT

Output Set: N:\CRF4\02142005\J776521A.raw

4 <110> APPLICANT: Fletchner, Jessica  
 5 Prince-Cohane, Kenya  
 6 Mehta, Sunil  
 7 Slusarewicz, Paul  
 8 Andjelic, Sofija  
 9 Barber, Brian  
 11 <120> TITLE OF INVENTION: HEAT SHOCK PROTEIN-BASED VACCINES AND  
 12 IMMUNOTHERAPIES  
 14 <130> FILE REFERENCE: 8449-405-999  
 16 <140> CURRENT APPLICATION NUMBER: 10/776,521A  
 17 <141> CURRENT FILING DATE: 2004-02-12  
 19 <150> PRIOR APPLICATION NUMBER: 60/503,417  
 20 <151> PRIOR FILING DATE: 2003-09-16  
 22 <150> PRIOR APPLICATION NUMBER: 60/463,746  
 23 <151> PRIOR FILING DATE: 2003-04-18  
 25 <150> PRIOR APPLICATION NUMBER: 60/462,469  
 26 <151> PRIOR FILING DATE: 2003-04-11  
 28 <150> PRIOR APPLICATION NUMBER: 60/447,142  
 29 <151> PRIOR FILING DATE: 2003-02-13  
 31 <160> NUMBER OF SEQ ID NOS: 419  
 33 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 35 <210> SEQ ID NO: 1  
 36 <211> LENGTH: 4  
 37 <212> TYPE: PRT  
 38 <213> ORGANISM: Malaria  
 40 <400> SEQUENCE: 1  
 41 Asn Ala Asn Pro  
 42 1  
 45 <210> SEQ ID NO: 2  
 46 <211> LENGTH: 9  
 47 <212> TYPE: PRT  
 48 <213> ORGANISM: Unknown  
 50 <220> FEATURE:  
 51 <223> OTHER INFORMATION: HLA-A2 peptide binding motif  
 W--> 53 <221> NAME/KEY: VARIANT  
 54 <222> LOCATION: 2  
 55 <223> OTHER INFORMATION: Xaa = Leu or Met  
 W--> 57 <221> VARIANT  
 58 <222> LOCATION: 6  
 59 <223> OTHER INFORMATION: Xaa = Val or Ile or Leu or Thr  
 W--> 61 <221> VARIANT  
 62 <222> LOCATION: 9  
 63 <223> OTHER INFORMATION: Xaa = Val or Leu

(pg. 6)  
 Does Not Comply  
 Corrected Diskette Needed  
 (pg. 2)

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Input Set : E:\SEQLIST (8449-405 Amended).TXT

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W--> 65 <221> VARIANT  
 66 <222> LOCATION: 1,3 , 4, 5, 7, 8  
 67 <223> OTHER INFORMATION: Xaa = any amino acid

W--> 69 <400> 2

W--> 70 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 71 1 5  
 74 <210> SEQ ID NO: 3  
 75 <211> LENGTH: 9  
 76 <212> TYPE: PRT  
 77 <213> ORGANISM: Unknown  
 79 <220> FEATURE:  
 80 <223> OTHER INFORMATION: HLA-A2 peptide binding motif

W--> 82 <221> NAME/KEY: VARIANT  
 83 <222> LOCATION: 2  
 84 <223> OTHER INFORMATION: Xaa = Leu or Met

W--> 86 <221> VARIANT  
 87 <222> LOCATION: 1, 3, 4, 5, 6, 7, 8  
 88 <223> OTHER INFORMATION: Xaa = any amino acid

W--> 90 <400> 3

W--> 91 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val  
 92 1 5  
 95 <210> SEQ ID NO: 4  
 96 <211> LENGTH: 8  
 97 <212> TYPE: PRT  
 98 <213> ORGANISM: Unknown  
 100 <220> FEATURE:  
 101 <223> OTHER INFORMATION: HLA-A2 peptide binding motif

W--> 103 <221> NAME/KEY: VARIANT  
 104 <222> LOCATION: 2  
 105 <223> OTHER INFORMATION: Xaa = Val or Gln

W--> 107 <221> VARIANT  
 108 <222> LOCATION: 1, 3, 4, 5, 6, 7, 8  
 109 <223> OTHER INFORMATION: Xaa = any amino acid

W--> 111 <400> 4

W--> 112 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu  
 113 1 5  
 116 <210> SEQ ID NO: 5  
 117 <211> LENGTH: 5  
 118 <212> TYPE: PRT  
 119 <213> ORGANISM: Unknown  
 121 <220> FEATURE:  
 122 <223> OTHER INFORMATION: HLA-DR peptide binding motif  
 124 <400> SEQUENCE: 5  
 125 Gln Lys Arg Ala Ala  
 126 1 5  
 129 <210> SEQ ID NO: 6  
 130 <211> LENGTH: 5  
 131 <212> TYPE: PRT  
 132 <213> ORGANISM: Unknown

There is no "Xaa" at this location.

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134 <220> FEATURE:  
 135 <223> OTHER INFORMATION: HLA-DR peptide binding motif  
 137 <400> SEQUENCE: 6  
 138 Arg Arg Arg Ala Ala  
 139 1 5  
 142 <210> SEQ ID NO: 7  
 143 <211> LENGTH: 7  
 144 <212> TYPE: PRT  
 145 <213> ORGANISM: Unknown  
 147 <220> FEATURE:  
 148 <223> OTHER INFORMATION: motif in heptamiric region recognized by heat  
 149 shock protein  
 W--> 151 <221> NAME/KEY: VARIANT  
 152 <222> LOCATION: 2  
 153 <223> OTHER INFORMATION: Xaa = Trp or any amino acid  
 W--> 155 <221> VARIANT  
 156 <222> LOCATION: 1, 3, 5, 7  
 157 <223> OTHER INFORMATION: Xaa = hydrophobic amino acid residues  
 W--> 159 <221> VARIANT  
 160 <222> LOCATION: 4, 6  
 161 <223> OTHER INFORMATION: Xaa = any amino acid  
 W--> 163 <400> 7  
 W--> 164 Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 165 1 5  
 168 <210> SEQ ID NO: 8  
 169 <211> LENGTH: 7  
 170 <212> TYPE: PRT  
 171 <213> ORGANISM: Unknown  
 173 <220> FEATURE:  
 174 <223> OTHER INFORMATION: motif in heptamiric region recognized by heat  
 175 shock protein  
 W--> 177 <221> NAME/KEY: VARIANT  
 178 <222> LOCATION: 2  
 179 <223> OTHER INFORMATION: Xaa = Trp or any amino acid  
 W--> 181 <221> VARIANT  
 182 <222> LOCATION: 1, 3, 5, 7,  
 183 <223> OTHER INFORMATION: Xaa = hydrophobic amino acid residue, particularly  
 184 tryptophan, leucine or phenylalanine  
 W--> 186 <221> VARIANT  
 187 <222> LOCATION: 4, 6  
 188 <223> OTHER INFORMATION: Xaa = any amino acid  
 W--> 190 <400> 8  
 W--> 191 Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
 192 1 5  
 195 <210> SEQ ID NO: 9  
 196 <211> LENGTH: 4  
 197 <212> TYPE: PRT  
 198 <213> ORGANISM: Artificial Sequence  
 200 <220> FEATURE:

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Input Set : E:\SEQLIST (8449-405 Amended).TXT

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201 <223> OTHER INFORMATION: mutated heat shock protei peptide  
 203 <400> SEQUENCE: 9  
 204 Lys Asp Glu Leu  
 205 1  
 207 <210> SEQ ID NO: 10  
 208 <211> LENGTH: 10  
 209 <212> TYPE: PRT  
 210 <213> ORGANISM: Adeno Virus  
 212 <400> SEQUENCE: 10  
 213 Ser Gly Pro Ser Asn Thr Pro Pro Glu Ile  
 214 1 5 10  
 217 <210> SEQ ID NO: 11  
 218 <211> LENGTH: 11  
 219 <212> TYPE: PRT  
 220 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)  
 222 <400> SEQUENCE: 11  
 223 Ser Gly Val Glu Asn Pro Gly Gly Tyr Cys Leu  
 224 1 5 10  
 227 <210> SEQ ID NO: 12  
 228 <211> LENGTH: 10  
 229 <212> TYPE: PRT  
 230 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)  
 232 <400> SEQUENCE: 12  
 233 Lys Ala Val Tyr Asn Phe Ala Thr Cys Gly  
 234 1 5 10  
 237 <210> SEQ ID NO: 13  
 238 <211> LENGTH: 9  
 239 <212> TYPE: PRT  
 240 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)  
 242 <400> SEQUENCE: 13  
 243 Arg Pro Gln Ala Ser Gly Val Tyr Met  
 244 1 5  
 247 <210> SEQ ID NO: 14  
 248 <211> LENGTH: 9  
 249 <212> TYPE: PRT  
 250 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)  
 252 <400> SEQUENCE: 14  
 253 Phe Gln Pro Gln Asn Gly Gln Phe Ile  
 254 1 5  
 257 <210> SEQ ID NO: 15  
 258 <211> LENGTH: 9  
 259 <212> TYPE: PRT  
 260 <213> ORGANISM: Influenza Virus  
 262 <400> SEQUENCE: 15  
 263 Ile Glu Gly Gly Trp Thr Gly Met Ile  
 264 1 5  
 267 <210> SEQ ID NO: 16  
 268 <211> LENGTH: 10  
 269 <212> TYPE: PRT

## RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/776,521A

TIME: 07:39:35

Input Set : E:\SEQLIST (8449-405 Amended).TXT

Output Set: N:\CRF4\02142005\J776521A.raw

270 <213> ORGANISM: Influenza Virus  
272 <400> SEQUENCE: 16  
273 Thr Tyr Val Ser Val Ser Thr Ser Thr Leu  
274 1 5 10  
277 <210> SEQ ID NO: 17  
278 <211> LENGTH: 8  
279 <212> TYPE: PRT  
280 <213> ORGANISM: Influenza Virus  
282 <400> SEQUENCE: 17  
283 Phe Glu Ala Asn Gly Asn Leu Ile  
284 1 5  
287 <210> SEQ ID NO: 18  
288 <211> LENGTH: 9  
289 <212> TYPE: PRT  
290 <213> ORGANISM: Influenza Virus  
292 <400> SEQUENCE: 18  
293 Ile Tyr Ser Thr Val Ala Ser Ser Leu  
294 1 5  
297 <210> SEQ ID NO: 19  
298 <211> LENGTH: 9  
299 <212> TYPE: PRT  
300 <213> ORGANISM: Influenza Virus  
302 <400> SEQUENCE: 19  
303 Thr Tyr Gln Arg Thr Arg Ala Leu Val  
304 1 5  
307 <210> SEQ ID NO: 20  
308 <211> LENGTH: 9  
309 <212> TYPE: PRT  
310 <213> ORGANISM: Influenza Virus  
312 <400> SEQUENCE: 20  
313 Cys Thr Glu Leu Lys Leu Ser Asp Tyr  
314 1 5  
317 <210> SEQ ID NO: 21  
318 <211> LENGTH: 8  
319 <212> TYPE: PRT  
320 <213> ORGANISM: Influenza Virus  
322 <400> SEQUENCE: 21  
323 Ser Asp Tyr Glu Gly Arg Leu Ile  
324 1 5  
327 <210> SEQ ID NO: 22  
328 <211> LENGTH: 9  
329 <212> TYPE: PRT  
330 <213> ORGANISM: Influenza Virus  
332 <400> SEQUENCE: 22  
333 Glu Glu Gly Ala Ile Val Gly Glu Ile  
334 1 5  
337 <210> SEQ ID NO: 23  
338 <211> LENGTH: 9  
339 <212> TYPE: PRT

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/776,521A

DATE: 02/14/2005  
TIME: 07:39:36

Input Set : E:\SEQLIST (8449-405 Amended).TXT  
Output Set: N:\CRF4\02142005\J776521A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. ~~1,2,3,4,5,6,7,8,9~~  
Seq#:3; Xaa Pos. ~~1,2,3,4,5,6,7,8~~  
Seq#:4; Xaa Pos. ~~1,2,3,4,5,6,7~~  
Seq#:7; Xaa Pos. ~~1,2,3,4,5,6,7~~  
Seq#:8; Xaa Pos. ~~1,2,3,4,5,6,7~~  
Seq#:295; Xaa Pos. ~~1~~  
Seq#:296; Xaa Pos. 3  
Seq#:301; Xaa Pos. 2,6  
Seq#:348; Xaa Pos. 5

## VERIFICATION SUMMARY

DATE: 02/14/2005

PATENT APPLICATION: US/10/776,521A

TIME: 07:39:36

Input Set : E:\SEQLIST (8449-405 Amended).TXT

Output Set: N:\CRF4\02142005\J776521A.raw

L:53 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:57 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2  
L:61 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2  
L:65 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2  
L:69 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2  
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:82 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:86 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3  
L:90 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3  
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:103 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:107 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4  
L:111 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4  
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:151 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:155 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:159 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:163 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:7  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:177 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:181 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8  
L:186 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8  
L:190 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8  
L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:3717 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:3721 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:295  
L:3722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:0  
L:3735 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:3739 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:296  
L:3740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:0  
L:3809 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:3813 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:301  
L:3814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:301 after pos.:0  
L:4471 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:4475 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:348  
L:4476 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:348 after pos.:0